

**I CLAIM:**

1. A ski binding release system comprising:

a track for receiving a ski binding member;  
a remote transmitter;

5 a receiver mountable on a ski with an actuator connected  
to the track; and

wherein the remote transmitter activates the receiver  
which in turn activates the actuator to move the track,  
thereby moving the ski binding member.

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2. An improvement to a ski binding release system, said ski  
binding release system having a toe piece and a heel piece  
to hold a boot, the improvement comprising:

a track connected to the heel piece; and

15 an actuator connected to the track which increases a  
mounting distance between the toe piece and the heel  
piece on demand from a remote signal.

3. A ski binding release system comprising:

20 a toe and a heel piece; and

a mechanism having an actuator to enlarge a mounting  
distance between the toe and the heel piece on demand  
from a remote signal.

25 4. A ski binding release system comprising:

a toe and a heel piece designed to have a mounting  
distance therebetween to secure a ski boot; and  
an extension mechanism to release the ski boot

by enlarging the mounting distance on demand from a remote signal.

5. An improvement to a ski binding release system, said ski binding release system having a toe piece and a heel piece to hold a boot, the improvement comprising:  
a track connected to the toe piece; and  
an actuator connected to the track which increases a mounting distance between the toe piece and the heel piece on demand from a remote signal.

10 6. The improvement of claim 2, wherein the track further comprises a flat rigid member having a forward and a rear anchor for attachment to a ski, wherein the flat rigid member slides in the anchors controlled by the actuator.

15 7. The improvement of claim 2, wherein the actuator further comprises a spring mechanism having a housing containing a main spring powering a rod connected to the track and a receiver to receiver the remote signal and release the  
20 actuator from a ski position to a release position.

8. The improvement of claim 7, wherein the housing further comprises a sliding shaft having a groove, a locking pin pivotally engaged in the groove and an electronically  
25 activated trigger to release the locking pin when the receiver powers a solenoid to move the trigger.

9. The improvement of claim 7 further comprising a transmitter contained in a ski pole to activate the receiver.

5 10. The improvement of claim 9, wherein the transmitter further comprises a safety switch to prevent an accidental transmission.

10 11. The improvement of claim 7 further comprising a mounting plate to house the toe piece, the track, the heel piece and the actuator, said mounting plate having a hole for mounting to a ski.

15 12. The improvement of claim 2, wherein the actuator further comprises a compressed gas cylinder having a piston connected to the track.

20 13. The improvement of claim 12, wherein the compressed gas cylinder further comprises a plug which is connected to a linear activator, wherein a receiver receives the remote signal and powers the linear activator to unplug the plug, thereby allowing a spring to move the actuator from a ski position to a release position.

25 14. The improvement of claim 13, wherein the plug blocks an outlet tube which emits a loud noise upon release of the plug.

15. The improvement of claim 12, wherein a gas in the compressed gas cylinder further comprises a color to assist locating a lost ski in powder upon the release of the compressed gas.

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16. The improvement of claim 13 further comprising a CO<sub>2</sub> cartridge connected to the compressed gas cylinder to provide a source of compressed gas.

10 17. The improvement of claim 16 further comprising a CO<sub>2</sub> cartridge housing and puncture mechanism to charge the compressed gas cylinder.

15 18. The system of claim 4, wherein the extension mechanism further comprises a moveable track upon which the heel piece is connected.

19. The system of claim 18, wherein the extension mechanism further comprises a spring loaded piston having a ski  
20 position with the spring compressed release position with the spring released, said piston having a locking groove, a locking pin removably engagable in the locking groove, and a receiver to receive the remote signal and power an  
25 electronic device to disengage the locking pin, thereby releasing the ski boot by causing the heel piece to move to a larger distance from the toe piece.

20. The system of claim 19 further comprising a wedge to receive a lever which can cock the spring loaded piston to the ski position.